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# Evaluation of A.I.D. Family Planning Programs, Kenya Case Study

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## SUMMARY

Since the mid-1960s, the U.S. Agency for International Development (A.I.D.) has been a lead donor in helping provide voluntary family planning services in developing countries. The goals of these services are to promote socioeconomic development and to improve the health of women and children. Kenya is one of the countries where A.I.D. has worked longest in population and family planningþmore than a quarter of a century. What has it achieved?

By the 1980s, population growth rates throughout the world were falling. Not so in Kenya. There the population growth rate was climbing. At its peak it reached nearly 4 percent, one of the highest in the world. Many Kenyan leaders were alarmed. Rapid population growth was placing enormous strains on Kenya's education system, health services, labor and housing markets, and fragile natural environment; it threatened to wipe out

economic gains and frustrate hopes for economic growth and improved living conditions.

Since then the trend has been reversed, in large part due to the political commitment of the Kenyan Government combined with accelerated efforts by A.I.D. and other donors to expand the family planning program. In 1989, to the surprise of many, statistics revealed that Kenya's population growth rate had finally begun to fall. Why? Could the family planning program claim credit? And what was the impact of A.I.D. assistance?

## A.I.D. Assistance

A.I.D. support has been a major reason for the overall impact and recent success of Kenya's family planning program. A.I.D. has assisted Kenya in population and family planning since 1972. At first the support came through centrally funded Cooperating Agencies. Since 1983 a large A.I.D. bilateral program, totaling more than $53 million, has also directly supported a broad range of family planning activities in Kenya.

While working collaboratively with other donors, A.I.D.'s special focus has been on expanding family planning services and improving their quality. Targeting certain program elements, A.I.D. support has made possible:

- Fertility surveys that drew attention to rapid population growth and monitored progress
- Family planning training for health workers
- Community-based family planning
- Businesses adding family planning to health services for their employees
- Introduction and wide acceptance of voluntary surgical contraception
- Better contraceptive logistics management
- Improved management of nongovernmental organizations

The nature and style of A.I.D.'s assistance have enhanced its impact. First, the presence of a strong technical staff in USAID/Kenya has been essential in allowing A.I.D. to provide high-quality, targeted technical assistance -- assistance that other donors simply are not prepared to provide. Second, A.I.D. has been willing to take on the "blue collar" jobs of building a family planning program -- such as logistics, institutional development, and financial and information systems. Third, by using central as well as bilateral funding mechanisms, USAID/Kenya was able to tailor technical assistance directly to local needs.

## Program Impact

The ultimate goal of a family planning program is to lower the population growth rate. To achieve this, it seeks to lower the fertility rate (i.e., the average number of children borne by each woman) and to increase the use of contraception. Kenya has now begun to succeed on all three counts:

- Kenya's population growth rate fell from a high of 3.8 percent a year in 1979 to about 3.6 percent in 1990.

- The fertility rate has dropped from about 8 children per woman in 1979 to about 6.5 in 1990.

- The use of contraception has almost quadrupled over the past decade. In 1978 just 7 percent of married couples of reproductive age used family planning. By 1989 the figure had jumped to 27 percent.

Increasing use of contraception, through the family planning program, has been the most important factor in the recent decline in fertility. While Kenya's population growth is still high, a long-established trend has been reversed, marking a significant breakthrough.

Kenya's family planning program is also helping improve the nation's health by reducing the incidence of high-risk pregnancies and births, factors that directly contribute to the illness and death of mothers and children. In Kenya fertility rates in all high-risk groups declined sharply between 1977 and 1989. There can be little doubt that this has contributed to declines in infant and maternal mortality.

The impact of the family planning program reaches beyond demographics and health. Many Kenyan families directly experience the economic benefits of family planning: by having smaller families, they can afford to feed, clothe, shelter, and educate all their children. For Kenya as a whole, cost-benefit analysis shows that investments in family planning are more than repaid by substantial savings in education, health, and other expenditures.

## GLOSSARY

| | |
|---|---|
| A.I.D. | Agency for International Development |
| AVSC | Association for Voluntary Surgical Sterilization |
| CBD | community-based distribution |
| CDIE | Center for Development Information and Evaluation |
| CHAK | Christian Health Association of Kenya |
| CORAT | Christian Organizations Research Advisory Trust |

| | |
|---|---|
| CYP | couple-years of protection |
| ECN | enrolled community nurse |
| FPAK | Family Planning Association of Kenya |
| FPIS | Family Planning Information System |
| FPMT | Family Planning Management Training project (subsequently called Family Planning Management Development (FPMD) |
| FPPS | Family Planning Private Sector project |
| FPSS | Family Planning Services Support project |
| IEC | information, education, and communication |
| KCPS | Kenya Contraceptive Prevalence Survey (1984) |
| KDHS | Kenya Demographic and Health Survey (1989) |
| K sh | Kenyan shilling |
| KFS | Kenya Fertility Survey (1977-1978) |
| LMIS | Logistics Management Information System |
| MCH/FP | maternal and child health/family planning |
| NCPD | National Council for Population and Development |
| NGO | nongovernmental organization |
| TFR | total fertility rate |
| USAID/Kenya | Agency for International Development field mission |
| UNFPA | United Nations Population Fund |
| VSC | voluntary surgical contraception |

MAP OF KENYA

# INTRODUCTION

## A.I.D. Assistance to Kenya

Since the mid-1960s, the U.S. Agency for International Development (A.I.D.) has been providing support to family planning programs in Kenya. Kenya is one of the first countries in sub-Saharan Africa to adopt a policy to slow population growth and was first in the region to set up a national family planning program. This evaluation, which is based on fieldwork

conducted in October 1990, examines the impact of that program and evaluates the role A.I.D. has played in its achievements.

The study focuses on the period 1983 to 1990 for three reasons. First, this is the period during which the Kenyan family planning program expanded its coverage and had its greatest (some would say its only) impact. Second, the earlier years are not well documented. Moreover, because two early A.I.D. projects were part of a multidonor effort, separating the impact of those from the activities of other donors would be difficult, even with better documentation. Third, A.I.D.'s earlier contribution constitutes less than 10 percent of the total A.I.D. assistance to family planning in Kenya.

## Evaluating the Effectiveness of Family Planning Programs

Two factors are at work in determining the effectiveness of family planning programs: "supply" and "demand." The supply of family planning services depends on

- Political commitment -- that is, the government's resolve, and actions, to lower fertility rates
- Administrative capability -- the ability of the government infrastructure to deliver services effectively
- The response of the private sector to the demand for family planning services
- Adequacy of funding

Popular demand for family planning services stems from a complex set of socioeconomic and cultural factors. Together these factors determine

- The perceived value of children
- The formal and informal flows of communication that set social norms
- People's response to public policy and to the changing social and economic environment

In Kenya A.I.D. assistance has focused chiefly on the "supply" side, working to improve the quality and quantity of family planning services offered throughout the country. A.I.D. projects have assisted family planning providers in both the government and the private sector. At the same time, socioeconomic changes have stimulated the demand for modern contraception by Kenyan couples, both to space their children and to limit total family size. This report first describes the recent changes in the demand for family planning and then discusses A.I.D.'s assistance in supplying family planning services.

## COUNTRY SETTING

### Demographics

Kenya, sitting astride the equator in East Africa, has a population of more than 24 million in a territory about the size of Oregon (about 225,000 square miles). Since achieving independence from Britain in 1963, Kenya has been one of the most politically stable and economically promising of all sub-Saharan countries. The Government has invested heavily in basic services, including health and education, and has made admirable progress in improving its citizens' standard of life. Life expectancy, for example, increased from 44 years in 1962 to 56 years by 1987 (see Table 1).

Table available on Microfiche.

About 80 percent of Kenyans still make their living from agriculture. They live on the 17 percent of Kenya's land that is arable, creating a fragile ecology in a country that is one of the last major habitats of diverse wildlife. The remainder of the land is mostly semidesert, and the desert encroaches more on the arable land each year.

Figure 1. Population Growth of Kenya, 1948-2015

Figure 2. Population Growth Rate: Kenya, 1948-1990

Figure 3. Crude Birth and Death Rates: Kenya, 1948-1990

There are some 40 different ethnic groups in Kenya, each with its own customs and language; Swahili serves as a unifying language. Since independence, the Government has emphasized pulling all Kenyans together, regardless of their different ethnic origins, and has been successful in building a Kenyan national identity.

In the 42 years since Kenya's first census in 1948, the population has more than quadrupled, rising from 5.4 million to more than 24 million in 1990 (see Figure 1). From 1948 to 1979 the annual rate of population growth also increased significantly, from 2.5 to nearly 4.0 percent (see Figure 2). This increase was due to a rapid decline in the death rate combined with an increase in the birth rate (see Figure 3). By 1979 Kenya had a total fertility rate (the average number of children borne by each woman) of 7.9, the highest known in the world and the highest ever recorded for a population as large as Kenya's (see Figure 4).

During the 1980s the Kenyan birth rate began to decline, and the population growth rate fell slightly, to the current level of 3.6 percent.{1} This trend is encouraging. Yet at this rate Kenya's population will double again in only 19 years. Even if the birth rate continues to fall, Kenya's population is bound to grow rapidly for the next several decades because half the population is less than 15 years old. As these young people reach childbearing age, they will keep the absolute number of births in Kenya high,

even if the average number of children borne by each woman declines. As a result, even under the most optimistic assumptions, the population of Kenya will more than double, reaching about 50 million by the year 2015. It will double again to more than 100 million before stabilizing late in the 21st century.

## Economy

Kenya traditionally has had one of the best performing economies in sub-Saharan Africa. During the first 17 years of independence (1963-1980), its per capita output grew by about 3 percent each year.

The worldwide recession of the late 1970s hit Kenya hard, however. Then in 1984, a devastating drought, on top of increasing scarcity of arable land, further slowed agricultural growth. Exports fell; inflation increased. Measured on a per capita basis, Kenya's economic output actually shrank from 1981 to 1984. Kenya experienced an economic recovery during the late 1980s, with overall economic growth of about 5 percent a year. Population growth, however, ate up almost all of this economic progress: economic growth per capita was only 1 to 1.5 percent.

As Kenya enters the 1990s, its economic prospects are increasingly clouded. Inflation continues to be troublesome; recent declines in the international price of coffee, a traditional mainstay of the economy, have hurt exports; and the number of young adults entering the weak labor market continually increases. Population growth threatens to overwhelm the economy since Kenya's labor force will almost double by the year 2000 (from 7.2 million in 1987 to about 14 million). About 2,500 jobs will need to be created each day to maintain a reasonable level of employment.

Population growth also exerts tremendous pressure on the land. At the time of independence, there was almost one hectare of arable land per person in Kenya. Today the figure is half that, and, at current rates of population growth, there will be only three-tenths of a hectare per person by the year 2000. With each new generation, farms are subdivided into smaller plots that are more difficult to cultivate, eventually forcing families into the ranks of the landless poor. Unequal land distribution aggravates the problem: two million small farms occupy less than four million hectares, while 3,700 large farms occupy almost 3 million hectares. These pressures on the land will continue for the foreseeable future, exerting great economic pressure on Kenyan families.

For the average Kenyan family, however, it is the rising cost of education that makes them feel directly the economic costs of high fertility. In fact, the cost of education has probably been the single most important factor contributing to increased demand for family planning in Kenya.

Kenya is remarkable for the widespread high priority its citizens

place on educating their children. Jomo Kenyatta, Kenya's first president, abolished primary school fees in the early 1970s; universal primary education was achieved in the late 1980s; in 1985 primary education was extended by an extra year (the eighth grade). These educational achievements have come at a high cost. Since 1970 education has absorbed 26 to 41 percent of the national recurrent budget -- and that essentially only covers teachers' salaries. The remaining costs -- books, supplies, and the building of new schools for the rapidly growing student population -- are the responsibility of local communities and parents. This obviously places enormous financial pressures on families, especially poor rural families whose income is earned partly in-kind.

## Sociocultural Factors and the Status of Women

Kenya's high fertility rate stems largely from patriarchal cultural traditions that prescribed early marriage and encouraged continued childbearing throughout a woman's reproductive years. In the past, large families contributed to the social status of both father and mother, added to the family's pool of labor, and also provided economic security in old age. The number of children borne to a woman was restrained, however, by related cultural traditions demanding that women breast-feed each child for 2-3 years and refrain from sexual relations during this time, an abstinence made possible by polygyny, that is, men having multiple wives.

Under British rule traditional cultural values and behavior began to give way. Now only a quarter of Kenyan women still live in polygynous unions, and the duration of breast-feeding and postpartum sexual abstinence -- traditional child-spacing practices -- has decreased. Nevertheless, most women's primary role is still that of wife and mother, and motherhood remains their most secure source of social and economic status. Marriage continues to be nearly universal, and, while age at first marriage has been rising, over half of all women marry before the age of 20. For those who do not, premarital sexual activity (and accidental pregnancy) is on the rise.

While traditional values blocked early efforts to establish family planning in Kenya, they are now giving way to modern values and economic realities. In particular, the changing status of women has made them more open to family planning.

Traditionally, fertility control in Kenya has been the responsibility of women. As modern contraception has been introduced, its use has remained chiefly the domain of women. The leading modern methods of contraception in Kenya -- the pill, IUD, injection, and tubal ligation -- are all "women's methods" requiring no active participation by a husband.

Women in Kenya today are much better educated than were their mothers and have much greater opportunity to make decisions independent of family and relatives. Fully 95 percent of

Kenyan girls age 15-19 years old have had some formal education, compared with only 35 percent of women age 45-49 years old. As everywhere, increased female education has a dramatic correlation with lower fertility levels. Today Kenyan women with no formal education have an average of 7.2 children; in contrast, women with 12 or more years of schooling average fewer than 5 children. Also, fewer women now work on communal or clan lands, and more women hold jobs with cash earnings that they control--even if earnings are only meager. With this growing economic independence has come a change in attitude. As women have become increasingly aware of options in addition to motherhood, they no longer view big families as essential for their status and security. Instead, they may see additional children as an obstacle to new opportunities or making ends meet in difficult times.

### Child Survival

In most societies high levels of infant mortality are closely linked to high fertility. In countries where infant and child mortality rates have fallen significantly, mothers begin to feel assured their children will survive. This gives them the confidence to have fewer children. This has now happened in Kenya.

At independence, the infant mortality rate was about 126 deaths per thousand live births. This rate has now decreased to about 71 per thousand (see Table 1), among the lowest in sub-Saharan Africa. Infant and child mortality rates are only slightly higher in rural than in urban areas.

In turn, family planning has helped lower child mortality by allowing Kenyan parents to space their children. According to the 1989 Kenyan Demographic and Health Survey (KDHS), children born after an interval of 4 years or more are twice as likely to survive infancy as children born within 2 years after a sibling.

## THE KENYAN NATIONAL FAMILY PLANNING PROGRAM

### Political Commitment

Kenya has been a pioneer among African countries, both in adopting population policies and providing family planning services. While some African countries continued to outlaw modern contraceptives, even as recently as the 1980s, family planning services have been offered in Kenya since 1957. At that time, Kenyan volunteers, including physicians, established a small family planning clinic in Nairobi and started four local family planning associations. In 1960 these four merged to become the Family Planning Association of Kenya (FPAK), which remains a leading partner of the Government in providing family planning services.

Almost immediately after Kenyan independence in 1963, some political leaders began expressing concern over negative impacts

of rapid population growth. In 1967 the Government announced that it was establishing a national family planning program. For at least the next decade, however, the program was not a high priority. The Ministry of Health, which was responsible for the program, had limited administrative capability and served a population that was clamoring for curative services. Also, in these early years public resistance and even hostility to family planning discouraged politicians from vigorously supporting it.

During the mid-1970s other donors, including the World Bank and United Nations Population Fund (UNFPA), joined A.I.D. in a more concerted effort to get the family planning program going. A fairly effective infrastructure for providing maternal and child health (MCH) services had been established and was strengthened. Only a portion of the MCH workers were trained in family planning, however. Thus access to contraceptive services remained poor, especially outside the major cities. As a result, use of family planning services was low, and drop-out rates were high. The Government and donors had established a goal of reducing the annual rate of population growth from 3.3 percent in 1975 to 3.0 percent in 1979. Instead, the 1979 census showed an increase to almost 4 percent!

Together with the sobering 1979 census results, the economic downturn in the late 1970s caused Kenyan officials to focus seriously on the problem of rapid population growth. President Kenyatta had given tacit support to family planning but never spoke out publicly on the subject. His successor, Daniel arap Moi, began to speak out frequently and forcefully in favor of family planning, after Kenyatta's death in 1978.

Given its worries about negative impacts of population growth, the Kenyan Government took major steps to expand the scope of population activities beyond the Ministry of Health to involve many other ministries in those activities. In 1982 responsibility for the population program was elevated to the newly created National Council for Population and Development (NCPD) in the Office of the Vice President.

Two years later, in 1984, the Government's commitment to slowing population growth reached a new peak. In a widely publicized speech at the Second International Conference on Population in Mexico City, Kenya's Vice President admitted that the country's efforts so far had failed to lower fertility, and he proposed remedial actions. Later that year the Kenyan Government convened the First National Leaders' Population Conference. At that conference President Moi spoke of the need to expand family planning services, urged all national and local leaders to actively support the program, and announced the decentralization of the population program to the district level. This was a turning point in Kenya's family planning program. The Government, Kenyan nongovernmental organizations (NGOs), A.I.D., and other donors intensified their efforts to provide more and better family planning services. New approaches were pursued to bring services closer to the public in their homes and work places, and new contraceptive methods were

introduced.

It is difficult to measure the effect of heightened political commitment in a complex bureaucratic and development environment. In the case of Kenya, however, it is clear that beginning in 1984, when the President and Vice President publicly discussed the population issue and supported concrete programs, performance improved significantly.

## Current Government Policies, Goals, and Strategies

Because of the strain that a rapidly growing population places on educational and health services, labor, and housing, reducing population growth is one of the highest priorities of the Kenyan Government today. Population is a major theme in the Government's Sixth Five-Year Plan (1989-1993), and this emphasis has been fully integrated into the planning process.

In 1989 a Second National Leaders' Population Conference put forth the latest statement of official policy and strategy in its "Plan of Action for the 1990s." The long-term objective of that plan is to reduce the population growth rate from the current 3.6 percent to 2.5 percent by the year 2000. To achieve this, the following targets were set:

- Reduce the birth rate from 54 births per thousand population to 42 in 1995 and then to 35 in the year 2000.

- Reduce the death rate from 14 deaths per thousand to 11 in 1995 and then to 10 in the year 2000.

- Increase contraceptive use from 27 percent of married women to 30 percent by 1995 and then to 40 percent by the year 2000.

To achieve these targets, the following strategies were proposed:

- Expand and intensify current service delivery approaches.

- Involve men more.

- Improve the status of women.

- Take related health measures.

## A.I.D. Assistance

The Kenyan Government and Kenyan NGOs share credit for marshalling the human, financial, and political resources required for the national family planning program. Donors other than A.I.D. have also made important contributions. A.I.D. assistance has focused on specific improvements needed to meet the growing demand for family planning services.

A.I.D. began supporting family planning in Kenya in 1972, but it contributed fairly small sums of money and had little on-the-ground presence until the early 1980s. While A.I.D. appears to have played a "seeding" role during this period, early projects were not very successful, perhaps due in part to the rudimentary government infrastructure at that time and the lack of serious interest in family planning throughout Kenya.

Since 1983, however, the picture has changed dramatically. USAID/Kenya now has a staff of eight professionals, Americans and Kenyans, assigned to family planning. The Kenyan family planning program is supported through four A.I.D. bilateral population projects totaling $59.2 million, supplemented by centrally funded projects (see Table 2).

Table available on Microfiche.

While A.I.D. has supported a wide variety of population activities in Kenya, its assistance has been concentrated in the following eight areas:

- Information for policymakers
- Community-based family planning
- Training of health workers
- Contraceptive logistics and management
- VSC
- NGOs
- The private sector
- The Council for Population and Development

Bringing Information to Policymakers

During the last 15 years, A.I.D. has supported three nationally representative surveys in Kenya: the 1977-1978 Kenya Fertility Survey (KFS), the 1984 Kenya Contraceptive Prevalence Survey (KCPS), and the 1989 KDHS. Findings from these three surveys have had a direct impact on population policies and program activities. It was the KFS that revealed in 1977-1978 that Kenya had the highest fertility in the world and that its annual population growth rate was nearly 4 percent. These results alarmed the Kenyan leadership and contributed directly to the increase in political commitment to family planning.

Seven years later, in 1984, the KCPS showed little change in fertility; this further strengthened political concern. Yet the KCPS also found an increase in the demand for family planning and the use of modern methods of contraception. It also revealed that most couples had to travel at least one hour to reach a

source of family planning. Taken together, these results encouraged further efforts to make family planning more widely available and more widely used.

The most exciting results come from the recent 1989 KDHS. This survey found evidence of a rapid decline in fertility during the preceding 5 years, an increase in contraceptive use to 27 percent of married couples, and a drop in desired family size to 4.4 children per family.

## Training Health Workers to Provide Family Planning

Training is essential to achieving the goals of expanding access and availability of high-quality family planning services. The Kenyan family planning program served half a million clients in 1988. This would not have been possible without the major effort in training undertaken by the Kenyan Government and funded largely by A.I.D. Since 1972, A.I.D. has supported training in family planning for more than 3,000 health workers -- 61 percent of all those trained in family planning -- at a cost of $5 million. As a result, more health facilities now offer family planning services. More and improved training is still needed, however. Currently, only 15 percent of Kenya's 15,400 Ministry of Health workers have training in maternal and child health and family planning (MCH/FP) and are providing family planning services.

The emphasis has been on training paramedical professionals, especially enrolled community nurses (ECNs), who are the main providers of MCH/FP services. ECNs are already highly trained, with 4 years of education post-high school. It is fairly easy therefore to add family planning to their skills. More important, they are oriented to primary health care, work at a grass-roots level, and are likely to remain there, providing services. Since most of them are women, they also tend to be more sensitive to the needs of their predominantly female clientele. The direct cost of the 7-week family planning training course for ECNs is $400 per trainee.

The evaluation identified certain problems with the training effort, however. It noted, for example, that training did not flow from a comprehensive strategy and that the trainers themselves needed more training. Moreover, in terms of subsequent service delivery, trainee selection was insufficient: only 54 percent of the ECNs trained were still providing services. Finally, the course curriculum was deficient in several respects and should have given particular attention to newer technologies and more effective methods, especially voluntary surgical contraception (VSC).

USAID/Kenya also has funded training for physicians. In the last 5 years, over 1,000 of Kenya's approximately 4,500 physicians received training in some aspect of reproductive health and family planning. More than 300 were trained in VSC. Besides improving physicians' skills, this training has probably also

contributed to wider acceptance and support for family planning within the influential Kenyan medical community.

## Introducing Voluntary Surgical Contraception

A.I.D. has been the sole donor for a ground-breaking component of the Kenyan national family planning program: VSC. A number of observers thought that sterilization would not be popular in sub-Saharan Africa, where cultural patterns favoring unlimited family size were seen as a sizable barrier; Africans might adopt modern child-spacing measures for health purposes, but they would never voluntarily end their fertility. Yet in the 8 years since its introduction, female sterilization (tubal ligation) has not only been the choice of increasing numbers of women, it has also been institutionalized. Tubal ligation now ranks just behind the pill as the most popular modern method of contraception.{2}

The VSC program owes its success to emphasis on high-quality service delivery and the introduction of a safer, less costly, more acceptable surgical technique: minilaparotomy under local anesthesia. This technique is much safer than older tubal ligation procedures, because it can be done with local rather than general anesthesia; it also eliminates a 7-day hospital stay. The program stresses thorough counseling to ensure that sterilization is fully voluntary and will not be regretted later. To help ensure voluntariness, clients must sign an informed consent form; many pay a small part of the cost of the procedure.

Since the program began in 1982, approximately 200 doctor-nurse teams, 300 counselors, and 600 field educators have been trained in VSC. Another 100 medical interns receive VSC training each year. This has allowed expansion of VSC services from just 2 sites to the current 50 sites. At the same time, there has been a dramatic increase in the number of women requesting VSC, from only 68 women in 1982 to almost 10,000 women a year in 1988 and 1989. About 50,000 procedures were performed by the end of 1990.

VSC is a highly effective contraceptive method, and is very cost-effective. The procedure costs $50 to $60 and provides, on average, 10 years of protection for each couple. Thus the cost per couple-year of protection (CYP) is less than $5, well under the range of $18 to $22 per CYP that A.I.D. considers reasonable. While cost recovery is practiced -- charges to clients range from $1 in government facilities to $2.50 in FPAK and Christian Health Association of Kenya (CHAK) -- a 1988 VSC evaluation found that demand is very price-elastic. That is, at levels beyond $5 the fall-off in clients who want VSC but find price a barrier is significant. This finding is perhaps not surprising given Kenya's average per capita income of only $1 per day and the highly uneven income distribution. Thus, with the procedure costing an organization $50-$60 per client and the practical difficulty in "amortizing" payment for it overtime, it is not likely at this time that VSC services can become financially sustainable without donor assistance.

The Kenyan VSC program has become a model for all of Africa.{3} It demonstrates to those countries in similar circumstances the feasibility and acceptability of integrating low-cost, high-quality VSC services into a national family planning program. In so doing, it fosters inter-African transfer of appropriate technology and experience, stimulates innovation, and contributes to regionwide institutionalization of an important and as yet underutilized method.

## Offering Family Planning in the Private Sector

Since the 1960s, A.I.D. support for population programs worldwide has gone chiefly to governments and private voluntary organizations. In the 1980s A.I.D.'s Office of Population decided to move more broadly into the private sector and work with for-profit firms. Kenya was the first country to launch a bilateral project to advance this new approach.

The Kenya Family Planning Private Sector (FPPS) project began in 1984. Its purpose is to add family planning to existing health services offered by for-profit companies, nursing homes, and religious and educational institutions to their employees or patients. These organizations receive financial and technical assistance for 2 years, after which they are expected to continue providing family planning services at their own expense.

Fifty-four organizations have joined in, and more than 104,000 persons now receive family planning services in the 154 facilities they operate. This accounts for about 10 to 13 percent of all Kenyans using modern contraceptive methods.

The record is somewhat mixed on the success of the project's efforts to promote sustainability. Of the 44 organizations that have completed 2 years of support, 27 (61 percent) no longer receive assistance, with the exception of free contraceptive supplies from the Ministry of Health. All these "graduated companies" have continued to provide family planning as part of their health services. Twenty-two of the 27 organizations are for-profit companies. However, a sizable proportion of the organizations that should have "graduated" from assistance after 2 years continue to receive some technical or financial support in addition to contraceptive supplies. Among the organizations continuing to receive assistance are eight for-profit companies.

There are several reasons why the transition to self-financing has not occurred as smoothly as expected. First, the three large NGOs (the CHAK, Seventh Day Adventist Rural Health Services, and Crescent Medical Aid) do not have the same ability to finance their own services as do for-profit organizations. But because of their size and years of experience providing health services to a large clientele, the three organizations account for about half of the family planning users in the project. Second, the small religious NGOs and the small nursing homes do not have the resources to move to self-financing after 2 years. Third,

many of the organizations that have assumed responsibility for continuing the clinical family planning services have been unable or unwilling to assume the costs of information, education, and communication (IEC) and service outreach, although there is general agreement that these are critical elements of successful programs. Part of the problem seems to be that FPPS did not include IEC activities in each of the subprojects it supports, but rather financed IEC and CBD as separate activities. Thus, many organizations do not necessarily view these costs as ones they are committed to honor.

In spite of these problems, a majority of for-profit firms that participated in the project now finance family planning services as part of their overall health services. This is a major step forward in the financial sustainability of family planning services in Kenya, not only because of the services now provided in the for-profit sector, but also because of what it says about the untapped potential in this sector.

Many Kenyan experts believe that to expect private organizations to assume all costs for family planning services after only 2 years is unrealistic. According to them, better long-term success can be achieved if assistance is gradually phased out. That may or may not be the case. The follow-on project that USAID/Kenya is planning should explore this and many other questions that have arisen during the first project. For example, who pays for the cost of contraceptives? Just as important is the need to cast the net more widely in helping for-profit companies and Kenya's many large parastatals to add family planning services to the benefits they provide employees. There is a rich experience here that needs to be explored to its fullest not only for the benefit of Kenya but for many other developing countries as well.

## Developing Community-Based Family Planning

Community-based distribution, largely funded by A.I.D., has made family planning far more accessible to rural and many urban poor people in Kenya. Community workers sponsored by NGOs take family planning services to people's homes and work sites. Their work thus complements that of government clinics and hospitals, which are all static facilities. By 1990, 35 percent of all sublocations (Kenya's smallest administrative unit) were served by community-based family planning workers.

The breadth and diversity of NGO community-based services is a major contributor to family planning success in Kenya. Still, community-based services could expand further. They offer an important means to extend access to family planning.

In Kenya, in contrast to many other countries, NGOs, rather than the Government, have played the major role in providing community-based family planning services. This effort complements the Government's provision of services in clinics and hospitals -- a partnership that makes family planning far more accessible and acceptable to rural people and to many urban

poor people than if services were available only in medical facilities. The experience of Chogoria Hospital illustrates how much can be achieved (see box). In addition to Chogoria Hospital, the major NGOs engaged in community-based distribution (CBD) are FPAK, Maendeleo ya Wanawake Organization, CHAK, and the Christian Organizations Research Advisory Trust (CORAT). Together, these organizations serve about 400,000 clients.

The diversity of organizations involved in CBD has expanded community services beyond what would have occurred had responsibility for CBD been more centralized. At the same time, it raises the need for coordination in order to avoid duplication. USAID/Kenya has supported efforts in this direction.

## Improving Contraceptive Logistics and Management

For a family planning program to succeed, every service facility and provider must always have enough contraceptives to meet clients' needs. A USAID Mission priority has been to improve the flow of contraceptives through the service delivery system and to improve family planning service statistics.

To accomplish this, A.I.D. has sponsored the development of two information systems. The Family Planning Information System (FPIS) collects standardized information on the number of outlets providing services; the number of antenatal, child health, and family planning visits; the amount of commodities dispensed; and the CYP that those commodities should provide. The Logistics Management Information System (LMIS) tracks contraceptive stock levels.

Creating these systems and setting them up nationwide has been a major achievement. A.I.D. has been the lead donor assisting Kenya in this essential area. From 1979 to 1985, an A.I.D. project, the Health Planning and Information project, worked with the Ministry of Health to strengthen its ability to plan, implement, and evaluate primary health care and family planning activities. A.I.D. first began to assist the Ministry in contraceptive supplies and management in 1984. Through the bilateral Family Planning Support Services (FPSS) project, A.I.D. has continued to be the lead donor providing technical assistance in contraceptive logistics systems design, family planning information systems, and staff training.

One activity was the creation of FPIS. The system was to bring together data not only on Ministry facilities but also on NGO CBD activities. Thus far, only Ministry facilities have been included.

The second initiative was the development of LMIS, a comprehensive long-range plan designed explicitly to strengthen contraceptive logistics. To achieve this, A.I.D., in 1987, began providing technical assistance to the Ministry's Division of Family Health through a buy-in to A.I.D./Washington's centrally funded Family Planning Logistics Management project (FPLM), implemented by John Snow, Inc. This activity has had greater success. In 1988 the new

system was ready for implementation. Initially tested in 21 districts, LMIS was operating in all 43 districts by September 1990. More than 1,000 Ministry personnel have now been trained to use LMIS.

In the clinics visited in central and coastal provinces, there was significant variation in how well LMIS was functioning. In Meru District, for example, the system was functioning extremely well. Forms were being submitted regularly up the line, and computerized feedback on contraceptive stock levels was coming back to the District Public Health Nurse. In other districts, the Daily Activity Registers were in use everywhere and quarterly summaries were being forwarded, but feedback was lacking.

It is a major achievement, attributable to both A.I.D. and the Ministry, that these systems have been created and put in place. This was step one. From this point, the challenge is for higher level officials to use the data being provided from the district level to improve planning and management, something that has not yet occurred through either of the two systems. LMIS has not yet produced significant improvement in contraceptive supply management. In many cases, nurses still find it necessary to travel to provincial or central warehouses to obtain needed supplies. Similarly, a 1989 evaluation revealed that FPIS data are not yet being used effectively by government officials for planning and management. Nevertheless, an important foundation has been established, one that will be essential for ensuring efficiency and impact as demand for family planning services increases. To facilitate this, USAID/Kenya and the Ministry have decided to fold FPIS into LMIS. Improving the use of information and ensuring the availability of a range of contraceptives to clients remain important but unrealized objectives at the time this study was conducted.

## Helping Nongovernmental Organizations Perform Better

Over the past decade the USAID Mission, the Government, and other donors have increasingly looked to a handful of Kenyan NGOs to play a greater role in expanding family planning services. Such organizations, however, depend largely on volunteers and have limited management capabilities. Mission population staff concluded that these NGOs had the potential to provide significantly more and better family planning services if their management could be strengthened. In 1987 USAID/Kenya used the centrally funded Family Planning Management Training (FPMT) project{4} to provide intensive technical assistance to three major Kenyan NGOs. Each one had a strong grassroots organization or an existing network of service delivery sites but had experienced a managerial and financial crisis.

For example, in 1987 FPAK was suffering from financial mismanagement, uneven program performance, rapid leadership turnover, and low staff morale. FPMT management specialists helped a new executive director clarify the organization's objectives, recruit and upgrade staff, design and institute a

new financial management system, develop a new strategy to expand service delivery, and develop personnel, supervision, and other management systems. Now FPAK is a competent, well-functioning organization. It is able to program effectively larger amounts of donor funding and is also called on increasingly by the Government for advice on service delivery and policy issues.

### Building the Capabilities of the National Council for Population and Development

When the National Council for Population and Development (NCPD) was created in 1982, it had a large mandate but a small, inexperienced staff. It was to become the Kenyan Government agency responsible for developing national population policy and for coordinating all Government and private-sector population activities.

A.I.D. is helping upgrade NCPD's technical expertise and capabilities in three areas:

- Administration: Assistance to improve the ability of NCPD to manage, coordinate, and monitor family planning programs.

- Policy formulation, planning, and evaluation: Technical and financial assistance in formulating national policies and strategies, performing demographic studies and program evaluations, and guiding district-level population activities.

- Information and communication: Technical and financial assistance to help NCPD plan and implement a national communication program and support the communication programs of six NGOs.

## PROGRAM RESULTS AND IMPACT

### Contraceptive Prevalence

Use of contraception in Kenya has increased substantially during the past 12 years. In 1977-1978 only 7 percent of Kenyan married women age 15-49 used contraception; by 1989, 27 percent did. This contraceptive prevalence rate is one of the highest among developing countries in sub-Saharan Africa, exceeded only in Zimbabwe and Botswana.

Modern contraceptive methods accounted for the largest part of the increase (see Figure 5). The proportion of women using modern methods rose from 5 to 18 percent between 1977-1978 and 1989, while the percentage using traditional methods increased only from 2 to 9 percent over the same period. Nevertheless, the traditional methods constituted one-third of all contraceptive methods in 1989, a slightly larger percentage than in 1977-1978. Among modern methods, the greatest gains occurred in the use of oral contraceptives, tubal ligation, IUDs, and injectables. These four

methods are almost equally popular, indicating that each serves the needs of an important group of contraceptive users.

Periodic abstinence was by far the most widespread of the traditional methods. Practiced by 7.5 percent of Kenyan couples, it was the single most popular method of family planning overall. Its efficacy is questionable, however, since only about one-third of the Kenyan women who have ever used this method can correctly identify the fertile period.

Both contraceptive prevalence and the mix of contraceptive methods vary widely from one part of the country to another. In urban areas, for example, 26 percent of women use a modern contraceptive method compared with just 16 percent of rural women. The prevalence of modern methods ranges from a high of 31 percent in Central province near Nairobi to a low of 10 percent in Western and Nyanza provinces. Better educated women are more likely to use a modern method than their uneducated peers. For example, 29 percent of women who have completed secondary education use a modern contraceptive method compared with only 10 percent of women with no education.

Some of the variation in contraceptive use is directly related to program inputs. Nyeri district offers a dramatic example. The Association for Voluntary Surgical Contraception (AVSC), supported by A.I.D., has helped make the Nyeri District Hospital a national center of excellence for voluntary sterilization training and services. Largely as a result of these efforts, more than 14 percent of currently married rural women in Nyeri district are now protected by tubal ligation -- almost double the rate in any other district in Kenya.

The family planning program has also succeeded in informing women about where to obtain contraceptive supplies and services. In 1977-1978, about 70 percent of Kenyan women knew where they could go for family planning. By 1989, 91 percent did. As to where Kenyans actually go for services, the 1989 KDHS found that about 70 percent of modern-method users obtain services from Ministry of Health facilities, and the remaining 30 percent are served by the private sector (where FPAK is the major provider). These figures may overstate the importance of the Government sector, however, since many Kenyans using NGO clinics mistakenly think that they are part of the Government network.

## Demand for Family Planning

The demand for family planning is high and has been rising rapidly in Kenya. Overall, about 75 percent of married women in 1989 said they wanted either to limit or to space future births. Increasing numbers of women, at ever earlier ages, are deciding to limit their family's size, a concept once considered alien to Africa (see Figure 6). Since 1977-1978 the percentage of married women wanting no more children has nearly tripled, from 17 to 49 percent.

Even more striking is the fact that 11 percent of married women said they did not want their last child. An additional 42 percent said they had not wanted their last child so soon.

Over the same period there has been a drop in ideal family size (the number of children a woman says that she would like to have if she could start all over again) (see Figure 7). Mean ideal family size fell from 7.2 in 1977-1978 to 4.4 children in 1989. In all age groups over 30, mean ideal family size is actually lower than the mean number of children ever born. In other words, for the first time women who have many children would choose to have fewer children if they could do it all over again.

More than one-third (36 percent) of currently married women have an unmet need for contraception. These are women who say they want either to limit their family size or else to space additional children but who are neither pregnant nor protected by postpartum amenorrhea and yet are not currently using contraception. Reasons they are not using contraception vary and indicate weaknesses in the delivery system. Some 22 percent of the women need a spacing method, while 14 percent need a permanent method of contraception. These data suggest that contraceptive use will increase further as the availability and quality of family planning services continue to improve.

## Demographic Impact

For the first time in its history, Kenya's fertility has fallen significantly. In 1977-1978, the total fertility rate (TFR) -- that is, the average number of children born to each woman -- was about eight children. Data collected in 1984 showed a slight decline in TFR to 7.7 (although this apparent decline was probably due to the underreporting of births in one province). Estimates for 1990 indicate that TFR has fallen substantially, however -- to 6.7, a decrease of one child per woman in just 5 years (see Figure 4). Of course, a TFR of 6.7 is still high by any standard; furthermore, only time will tell if this recent decline in fertility will continue.

The national average fertility rate masks considerable differences within Kenya. For example, women in Nairobi bear an average of 4.6 children compared with rural women in the poorer and more strongly traditional Western province, who bear an average of 8.1 children. In fact, fertility in Western province has declined only by 1.2 percent since 1977-1978. By comparison, in Central province fertility has dropped 30 percent during the same period.

Fertility has declined in every reproductive age group, but the changes have been greatest among older women (see Figure 8). From 1977-1978 to 1989 fertility fell by 28 percent among women age 40-44 and by more than 76 percent among women age 45-49. Young women, age 15-24, also experienced a sharp decline in fertility, 18 to 19 percent. Fertility was least affected in the prime childbearing years of 25 to 39. It fell by only 11 to 14

percent in that age group.

Kenya's family planning program has been the most important reason for the decline in fertility. In any analysis to determine causes of fertility levels, it is important to consider the four factors (the proximate determinants of fertility) that may constrain women's natural fertility:

- Marriage patterns (both age at marriage and the proportion of women who marry)

- Postpartum amenorrhea (which is linked to breast-feeding)

- Contraception

- Abortion

In the absence of any of these four inhibiting factors, women are capable, in theory, of bearing an average of more than 17 children during their reproductive years.

In Kenya, postpartum amenorrhea (and the sexual abstinence traditionally associated with it) has long exerted the greatest influence on fertility levels. In 1977-1978, for example, postpartum amenorrhea accounted for three-quarters of the difference between women's actual fertility and the theoretical maximum (see Figure 9). By 1989, however, that proportion had dropped to 50 percent. As the impact of postpartum amenorrhea dwindled, the rising age of marriage and increasing use of contraception became more important. By 1989 each accounted for 25 percent of the difference.{5}

In the absence of other changes, the weakened effect of postpartum amenorrhea would actually have increased Kenyan fertility by 1.4 births per woman between 1977 and 1989. Contraception, along with changing marriage patterns, counteracted this trend: together they reduced fertility by 2.9 births per woman. Most of this fertility decrease, 2.0 births, was due to the growing use of contraception.

## Health Impact

Childbearing patterns influence infant and maternal illness and death rates. In particular, children born to women who are too young (18 and under), too old (35 or over), of high parity (4 or more children), or who space their births too closely (less than 2 years apart) are more likely to be ill or to die at birth or in infancy. This is especially true in developing countries where parents lack access to sophisticated neonatal and infant care. Thus family planning programs, by reducing the number of high-risk births, can improve child survival.

In Kenya fertility rates in all four high-risk groups declined sharply between 1977 and 1989. The birth rate fell by 26 percent for women under age 18, by 22 percent for women over age 35, and

by 15 percent for women who had already borne four or more children. In addition, the proportion of births taking place less than 2 years after a prior birth fell by 24 percent.

While high-risk fertility in Kenya remains frequent by world standards, the situation has improved. There can be little question that the drop in the incidence of high-risk births has been partly responsible for the continuing decline in infant mortality (see Table 1).

## Economic and Social Impact

Investing in human resources can yield social and economic benefits just as important as those gained by investing in industry, roads, and communications. Investment in family planning is a case in point. In a modernizing economy, having fewer children means greater social and economic opportunities for women, who constitute an increasingly important segment of the labor force. Fewer children also means lower government expenditures for education, health, and other basic social services.

To illustrate the relative costs and benefits of family planning, we can compare the impact of three different scenarios on Kenya's future.{6} Costs are figured in terms of the cost of the family planning program. Benefits are figured only for savings in government spending on education and health care; other possible costs and benefits that would result have not been added in. The first scenario is to expand and improve significantly the family planning program so that the number of clients increases by an estimated 7.5 percent each year. The second scenario keeps the family planning program operating at its current moderate level, with the number of clients growing by an estimated 5 percent each year. The third scenario, calculated purely for purposes of comparison, is no family planning program at all. The analysis covers the years 1980 through 2010.

Scenario 1 -- expanding and improving the program -- would boost both contraceptive use and family planning costs to their highest levels. Contraceptive use would reach 42 percent in the year 2000 and 62 percent in 2010. Program cost would double by the year 2000 and then double again by 2010.

With a more moderate family planning program (Scenario 2), contraceptive prevalence would reach 35 percent in the year 2000 and 40 percent in 2010. Costs would also grow -- to 1.8 times the 1990 level in the year 2000 and to 2.8 times in 2010.

The benefits, long-term savings in government expenditures for education and health, would far outweigh family planning program costs (see Figure 10). When the expanded program is compared with no program at all, the costs initially exceed the benefits despite a decline in fertility. This is because there is a 6-year lag between averted births and resulting savings on education. Savings begin by 1992, however, and reach 335 million Kenyan shillings (K Sh) in 1995 and nearly K Sh2.8 billion in

2008 (about $15.2 million and $127.3 million at current exchange rates). By the year 2008, the Kenyan Government would be saving K Sh1.7 for every shilling invested in the expanded family planning program. The estimated internal rate of return (IRR) is 18.3 percent, which compares favorably with other possible development investments.

When the costs and benefits of an expanded program are compared with those of the current moderate effort, additional savings first appear in 2002 and reach a level of nearly K Sh441 million ($20 million) annually by 2008. The cost-benefit ratio under this model is 1.14, and the IRR is 14.7 percent, which is remarkably good given the short time horizon of these projections.

In these scenarios, the cumulative savings on education and health expenditures alone far outweigh the costs of family planning, supporting the position that family planning expenditures in Kenya can be justified not only on social and humanitarian grounds, but on economic grounds as well.

## SUSTAINABILITY

How self-sustaining are A.I.D.'s family planning projects in Kenya? Would they continue if A.I.D. funding ended after current projects terminate? In terms of technical and administrative function, Kenyan projects are well on their way to self-sufficiency. This is no accident: A.I.D. projects in Kenya have made sustainability a high priority and have emphasized institutionalizing family planning (see Table 3). Kenya's financial resources are limited, however, and the Government on its own would not be able to keep pace with the rapidly growing demand for high-quality family planning services in the near future.

### Technical and Administrative Sustainability

The A.I.D. projects have, from the start, fostered Kenyans' technical and administrative capabilities so that Kenyans eventually can take full responsibility for the family planning program. Before plans for each project can go forward, there must be a consensus among both Kenyans and A.I.D. personnel on objectives and implementation and a clear definition of those objectives. Equally important, the projects, while often encouraging new approaches, have not neglected more routine but critical program needs.

The projects have been integrated into existing national institutions, including the basic health care delivery system, and they have strengthened those institutions by providing management training, improving existing administrative systems, offering technical training, and transferring technology.

Finally, by stimulating community participation and by responding to community requests, the projects also have created a more

favorable environment for programs to continue.

### Financial Sustainability

The financial prospects are less favorable. Given economic realities in Kenya, the Government will not be able in the near future to pay for family planning services without donor assistance. Nor will poor Kenyans be able to afford to pay the full cost of contraceptives.

USAID/Kenya has helped shift some costs to the private sector and to contraceptive users. The FPPS project -- the first of its kind sponsored by A.I.D. anywhere -- has succeeded in transferring some costs of family planning services to employers in the private sector. A.I.D. projects have also encouraged user fees where possible, but what clients can pay is only a small part of actual costs.

### Future Demand for Contraception

Kenya has a very young population. At least half the people are under 15 years old. With so many women entering the childbearing years during the next decade, at best Kenya can expect only a modest short-term decline in its population growth rate. It is virtually inevitable that the population will double to 50 million by the year 2015. How much larger it might become depends on actions taken now.

The demand for family planning services may become extensive as the number of women of reproductive age increases and assuming that an increasing proportion of those women will choose to use contraception. If the use of modern contraceptive methods continues to increase at approximately the same rate as in the recent past, there could be three times as many married women using modern methods in the year 2000 as in 1989 -- 1.7 million compared with 575,000.

Kenya's family planning program must expand considerably over the next decade if it is to serve these new users. This, in turn, will demand greater financial commitments by both the Government and donors, as well as greater involvement by the for-profit private sector. Meeting these challenges will be crucial to sustaining the progress made so far by Kenya's family planning program.

## LESSONS LEARNED

### About A.I.D. Assistance

1. The nature and style of A.I.D.'s assistance was crucial for the expansion and institutional strengthening of Kenya's family planning program. Among A.I.D.'s strengths were the following:

- The presence of a strong technical staff in Kenya. While a technically strong in-country staff has been one of A.I.D.'s inherent strengths as a donor in all sectors, it is especially important during the development stages of complex population assistance programs.

- Hands-on problem solving. A.I.D.'s hands-on approach has been an important factor in its ability to establish close professional working relations with both the public and private sectors. A.I.D. has been willing to take on what might be called the "blue collar" jobs of building a family planning program, such as logistics, institutional development, and financial and information systems.

- The combination of central and bilateral funding mechanisms. The use of both central and bilateral resources has made it possible for A.I.D. to capitalize on its strengths as a donor. The Mission's use of buy-ins to central projects was important in providing technical assistance for the program, and it ensured that these activities were consistent with and directly supportive of the Mission's strategic goals and objectives. Sole reliance on one funding source or another would have limited the Mission's options to respond to opportunities. This was especially the case in expanding private-sector initiatives since governments are often reluctant to use scarce bilateral funds for these purposes.

- Matching assistance with clear comparative advantage. A.I.D.'s focus on service delivery matched the most critical unmet need in Kenya and engaged A.I.D. in the area of support where it enjoys a comparative advantage. Other donors are simply not prepared to provide high-quality technical assistance to support service delivery programs.

2. An appropriate combination of interventions in both the public and private sectors is essential in establishing family planning accessibility and program sustainability. Very few national family planning programs rely on any one sector to deliver services. Although Kenya has a strong government-financed rural public health system, it alone cannot reach everyone seeking family planning services. At the same time, Kenya's NGOs and private, for-profit sector cannot on their own provide complete coverage. Thus donors such as A.I.D. should not rely on interventions with a single focus but rather use multiple approaches, which also help minimize the impact of the inevitable set-backs and delays experienced during the early days of program development.

3. Innovation and risk-taking are important. While many of the lessons learned in Asia and Latin America also apply to Africa, others do not. Because VSC came late to many countries in Latin America and Asia, experts argued that Africa was not yet ready for it. They contended that African couples would be interested in family planning only for child spacing, not for limiting family size. A.I.D. nevertheless decided to try the method in

Kenya. The public response revealed a substantial demand, and Kenya is now playing the lead role in introducing this method to other African countries.

4. Periodic, high-quality surveys are a valuable tool for guiding population policies and programs. In Kenya three fertility surveys financed by A.I.D. were instrumental in calling policymakers' attention to the urgency of the population problem. These surveys also have monitored the progress of the program. The most recent results, which found that the increase in the population growth rate had finally been reversed, have encouraged Kenyans to redouble their efforts.

About National Family Planning Programs

1. To succeed, family planning programs need strong political support at the highest levels. An official policy without strong political backing is not enough. This is especially true when a program is just beginning and is trying to overcome bureaucratic inertia and opposition as well as pronatalist cultural beliefs and practices. The Kenyan family planning program began to make progress only when the nation's president publicly and consistently endorsed its aims and made family planning a national priority.

2. The collaborative relationship between the Government of Kenya and the private sector is a model for other sub-Saharan African countries. Collaboration between the Government and the private sector is crucial to expanding the availability of family planning services. The Kenyan model of cooperation, involving both NGOs and for-profit firms, serves the program well. It has expanded resources and increased the geographic and demographic reach of family planning services.

3. Female service providers encourage the use of family planning. Since women are the chief users of family planning, it is important to be able to relate to and address their concerns. In Kenya, the workers providing family planning counseling and services are chiefly women, with the result that mothers are more willing to ask about, adopt, and continue to use family planning.

4. African culture does not pose a permanent obstacle to modern family planning. The Kenyan experience shows that nothing inherent in African culture makes it forever resistant to modern family planning. As in other regions of the world, modern values and economic pressures are replacing traditional values and behavior. Thus, while African cultures traditionally have been pronatalist, they can and do change. In Kenya, for example, women are now using modern contraception not just to space their children, but also to limit the size of their families.

ENDNOTES

1. Throughout this report demographic data derive, unless otherwise indicated, from the 1989 Kenya Demographic and Health Survey (KDHS). Where cited, 1984 data derive from the Kenya Contraceptive Prevalence Survey (KCPS); 1977-1978 data derive from the Kenya Fertility Survey (KFS).

2. Nearly all VSC in Kenya is female sterilization. Small vasectomy information, education, communication (IEC) efforts are underway, and vasectomy may well become more popular in the future. At present, however, owing to widespread fears and misconceptions, only 30 to 40 vasectomies are performed annually in Kenya.

3. Since 1986 over 50 provider teams from at least 22 countries (Uganda, Tanzania, Zambia, Zimbabwe, Nigeria, Sudan, Ghana, Guinea, Mali, Ethiopia, Mauritius, Zaire, Burundi, Sierra Leone, Senegal, Malawi, Togo, Lesotho, Liberia, and Madagascar) have been trained in Kenya. In Uganda, Tanzania, Nigeria, Ghana, and Mali, this has led to the establishment of VSC programs similar to those in Kenya.

4. Subsequently called Family Planning Management Development (FPMD).

5. While the incidence of abortion in Kenya is not known, it is generally believed to be low nationally. In lieu of reliable data on the incidence of abortion, Robinson and Harbison (1990) introduced a correction factor to account for abortion in this analysis of the proximate determinants of fertility in Kenya.

6. This analysis has been prepared using a computer model, the Family Planning Program Evaluation, Planning, and Financial Analysis Model (FAMPLAN), recently developed by the Research Triangle Institute (RTI).

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